

# Health in All Policies? The case of policies to promote bicycle use in the Netherlands

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**Abstract** To gather insight on how Health in All Policies (HiAP) is applied in practice, we carried out a case study on transport policies intended to stimulate a shift from car use to bicycling. We reviewed 3 years (2010, 2011, and 2012) of national budgets and policy documents in the Netherlands, followed by two focus group sessions and a second round of document analysis. We found to our surprise, given the country's history of bicycle promotion, that no HiAP approaches for bicycle promotion remain in place in national transport policies. The Netherlands may face serious challenges in the near future for facilitating bicycle use. Inclusion of health goals requires that the health sector work towards acquiring a better understanding of core values in other sector's policies.

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## Introduction

'Health in All Policies' (HiAP) is "an approach to public policies across sectors that systematically takes into account the health and health systems implications of decisions, seeks synergies, and avoids harmful health impacts, in order to improve population health and health



equity”.<sup>1</sup> HiAP recognizes that circumstances outside the health sector, including spatial quality (how space is used), housing, and education opportunities, influence population health.<sup>2,3</sup> In the Netherlands, HiAP is prominently mentioned in governmental policy documents.<sup>4,5</sup> Assuring HiAP in practice, however, is not automatic; it requires knowledge and awareness about relationships between health determinants and policies outside the health sector, identification of common goals, and governance mechanisms (such as legislation or cooperation structures) that support joint policy development.<sup>6</sup>

In looking for a case example of successful HiAP in the Netherlands, we decided to study recent years of Dutch transport-related policies on national level, focusing specifically on policy to stimulate bicycle use. We did so because ‘healthy’ transport policy, and in particular bicycle policy, is a good HiAP example, promoted by health promotion experts and international bodies.<sup>7–9</sup> Policies promoting active transport exist in several countries and tools to assess economic and health impacts of such policies – the World Health Organization’s ‘Health Economic Assessment Tools’, for example, are available.<sup>10</sup>

The Netherlands is internationally recognized as one of the world’s most bicycle-friendly countries.<sup>11</sup> Thus, we hoped to present interesting examples of good HiAP practice. However, we found, to our surprise, that opportunities for bicycle promotion remain underutilized; the Netherlands may face serious challenges in the near future to facilitating bicycle use.

## Bicycle Culture in the Netherlands

Located in north-west Europe on the North Sea coast, the Netherlands is a densely populated coastal lowland country occupying 41 543 km<sup>2</sup> with a population of about 16.8 million. The climate is temperate: cool summers and mild winters. Day-to-day transport by bicycle is common, in particular for shorter distances: 31 per cent of travel from home to school is by bicycle, 28 per cent of all shopping trips, 25 per cent of all commuter travel, and 21 per cent of travel to visit friends and family. Bicycle use is widespread across all age groups, from children to the elderly, and across all social groups. Captains of industry, ministers, and even Dutch royalty ride bicycles.<sup>12,13</sup> There are 18 million bicycles in the Netherlands and 84 per cent of all Dutch residents own one or more.<sup>14</sup> A recent large-scale study among Dutch bicycle users reveals that several population groups under-utilize the bicycle for shorter trips as compared

with other groups. The authors conclude therefore that space exists for further increase of transport by bicycle in the Netherlands.<sup>15</sup>

The country has a supportive bicycle infrastructure. This includes 35.000 km of designated cycle paths and bicycle parking facilities everywhere. For example, Dutch railway stations accommodate up to 330 000 bicycles. Riding a bicycle is relatively safe in the Netherlands, although helmets or other special gear are not mandatory nor regularly used. Comparison by traffic-related casualties puts the Netherlands in fourth place among the 27 EU member states with 40 casualties per million inhabitants annually. Only Malta, Sweden, and the United Kingdom perform better (30 casualties per million inhabitants).<sup>16</sup>

This supportive environment developed over many years. Founded in 1883, the Dutch national cyclists and motorists organization, ANWB, and, since 1975, its successor bicycle organization, Fietsersbond, has persistently and successfully promoted the interests of cyclists regardless of class, region, or religion, in a non-confrontational way.<sup>13</sup> Triggered by growing public concern about safe traffic, government invested in safety and bicycle infrastructure and in discouraging car use from the 1970s to the 1990s. The result was a huge increase in cycling.<sup>11</sup>

The Dutch bicycle industry was booming with design of a typical Dutch style of bicycle along with accessories that were practical and suitable for all-weather conditions.<sup>13</sup> These factors and actors have contributed to a Dutch boast: bicycle transport became a ‘typical Dutch’ phenomenon.

What has happened since the 1990s? Below we summarize our methods for studying policies relevant to promotion of bicycle transport and the results. Finally we present conclusions, recommendations, and lessons.

## Methods

We studied transport related national policies in the Netherlands 2010–2012 to:

- identify policy approaches aiming to stimulate a shift from car use to bicycling as a day-to-day active transport mode;
- learn about the role of the health sector and its priorities in such policies; and



- understand the characteristics and scope of these approaches.

We applied an iterative approach. We identified and studied policy documents published by ministries that describe policies, then discussed the contents and their implications for bicycle promotion policy in focus groups, and finally, based on information gleaned from the groups, re-analyzed the policy documents. We reviewed documents including the annual National Budget documents of 2010, 2011, and 2012 for those ministries that address transport and ‘spatial policies’ (policies pertaining to balancing environmental, safety, and other concerns in how space is used), as well as the Ministry of Education, Culture and Science, the Ministry of Social Affairs and Employment, and the Ministry of Health, Welfare and Sports.

A new Government took office in October 2010. As this may have induced policy changes, we collected information from this point in time onwards. Between 2010 and 2012, the new government combined several ministries and redistributed responsibilities. Thus, we looked at ‘old’ and ‘new’ ministries’ policy documents. In total, we reviewed 20 National Budget policy documents: 8 for 2010, 6 for 2011, and 6 for 2012. We used 25 search words referring to bicycling, and added ‘walking’, as in HiAP these ‘active transport’ options are often linked (Figure 1). We stored text fragments that related to any shift from car use to cycling or to active transport.

We used the same words to search the comprehensive national database of parliamentary documents that contains all documents sent to Parliament by ministries and Members of Parliament, as well as, among others, reports of all debates.<sup>17</sup> We selected ministerial documents that contain the final decisions and connected budgets that shape



Figure 1: Search terms for policy documents.

how policies are implemented. After identifying and storing all possibly relevant documents we stopped searching at the ‘saturation point’ – when no new documents appeared using new search terms.

We invited local and regional policy makers to participate in focus groups to explore how local and regional policy makers perceived the national policies. We did so particularly because the national policy documents often referred to these other policy levels. One focus group contained four provincial civil servants responsible for transport policies and one representative of the Inter Provincial Platform (a body that represents the interests of the Dutch provinces); the other focus group contained six municipal civil servants, one representative of the national municipalities organization, and one representative of a national transport knowledge center. We presented findings from our initial document review to the groups, asking them to comment, and to describe cooperation among policy levels in making transport and related policy. We used a topic list and protocol in each focus group; we included an observer and recorded the sessions. We distributed, for correction, the report of each group to all its members, including the observer. Finally we again analyzed the documents from the first phase.

We used four questions to describe and analyze the policies identified:

1. *Is the identified policy an example of HiAP?* We used Storm *et al*’s typology (Figure 2) to answer this question.<sup>18</sup>
2. *What policy tools are applied?* Based on Hoogerwerf and Herweijer’s typology,<sup>19</sup> we distinguished legal tools (legislation, regulations), economic tools (subsidies, rewards, penalties), communicative tools (information, health promotion), and physical tools (providing cycle/walking facilities, other environment adjustments).
3. *What are the goals of the policies and what drove policy?* We focused on goals and drivers instead of policy outcomes because outcomes require time to become apparent and they depend on many other factors such as past policies, technological developments, and cultural aspects.<sup>20</sup> Many policies develop ‘incrementally’, through step-by-step adaptation of current policies, in a highly complex setting involving many actors and interests. Policy goals sometimes serve as *ex post* rationalization of policy decisions and can be traced back to underlying values (policy drivers).<sup>21,22</sup>
4. *How are responsibilities distributed between different policy levels (national, provincial, municipal)?*

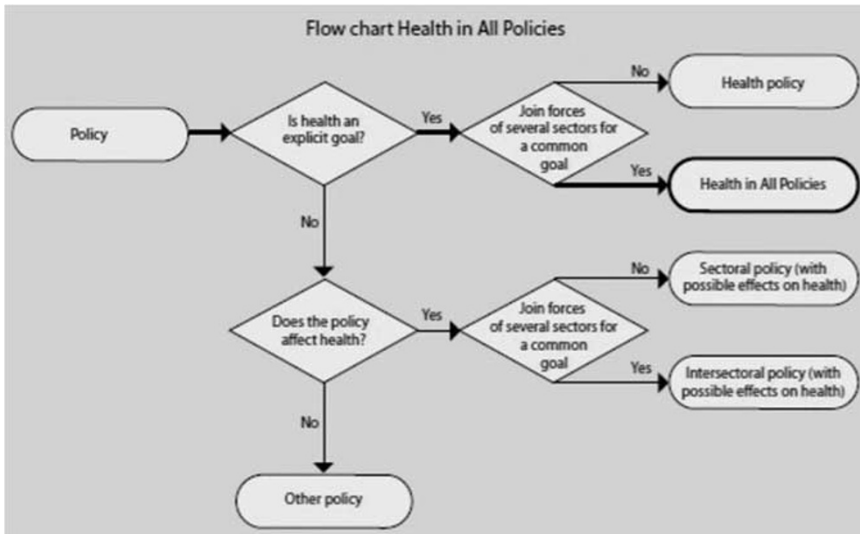


Figure 2: Flow chart HiAP, Storm et al 2007.

## Results

We describe results in three sections corresponding to the three stages of our study.

### Phase 1: Policy document screening

Review of National Budgets (2010, 2011, 2012) yielded 76 hits. Of these, one case – a fragment in the National Budget for the Ministry of Health, Welfare and Sport in 2012 – briefly mentioned stimulating a shift from car to bicycle.

Review of the policy document database yielded hundreds of hits per search term leading to 55 relevant documents at saturation point. Promoting bicycling was never mentioned explicitly, but, implicitly, the texts refer to ‘streamlined transport chains’ (using more than one form of transport) that include bicycles. In one case, health benefits of bicycle use appeared as a one-sentence argument to support ‘bike parkings’ (secure facilities to temporarily place bicycles) at railway stations.

## Phase 2: Focus groups

When we presented our preliminary findings, the respondents unanimously stated that national policies aimed at promoting a shift from car to cycling (and walking) are currently non-existent in the Netherlands. They indicated that this omission amounted to a change from earlier policies, at least for cycling. ‘Accessibility’ according to our respondents was the main national transport policy goal – the ease of reaching destinations by different forms of transport. Other policy goals, such as those related to climate, sustainability, or reduction of traffic-related deaths or injuries appeared in transport policy during the study period 2010–2012, but less prominently.

Respondents emphasized that many elements of policy that had been coordinated nationally during several previous governments now decentralized. Cycling is one of these. Our respondents reported that it is difficult for policy actors – at levels lower than the national one – to bring cycling forward as an important and urgent policy issue in need of attention. National policies provide a framework for dialogue among national and regional or local level policymakers. Financing is often restricted to policy priorities predefined by the ministries. Consequently, municipalities and provinces tend to copy the policy goals of national government, placing the ease of reaching destinations – accessibility – prominently on lower level policy agendas.

At the lower (regional and local) policy levels, issues beyond ‘accessibility’ do play a role in transport policies – health, attractive environments, economy, energy, and safety. Provinces and cities actively address cycling, and sometimes walking. Our respondents indicated that although the focus is more likely to be on facilitating ‘all options’ than on the shift from automobiles to bicycles, there are local and provincial policies that lure or nudge people to cycle. They provided examples, including restricting car access to parts of the city or financial incentives such as Value Added Tax exemption on bicycle purchases, intended to stimulate employees to buy their own.

The group of provincial civil servants said national government’s views only partly steer local and regional policy directions. They pointed to technological developments such as the *e-bike*, a bicycle propelled by a small electric motor to ease pedaling. This necessitates infrastructure adaptation, including ‘bike highways’ (long-distance roads for bicycles



only). They observed changes in citizen attitudes, particularly among younger generations who care less about owning a car, and view bicycles more positively than older generations. Finally this group noted that the private sector contributes to new transport policies with innovations in bicycle technology.

Respondents in both groups indicated that although national policies do not *intend* to stimulate bicycle use, they do so anyway. The policy to stimulate train use by facilitating bicycle transport to, and parking at, railway stations, and bicycle rent facilities for train travelers, has had this effect.

### Phase 3: Policy documents revisited

In re-analysing the documents, we identified eight important national policies that, although not explicitly aimed at promoting a shift from car to bicycle, do directly or indirectly address this topic (Table 1). These policies are connected in several ways, forming a policy ‘web’ motivated by ‘accessibility’ and economic development together (Figure 3).

In this web, we distinguish three core policies:

1. The *Structure vision infrastructure and spatial development policy* incorporates generic national values and priorities. The national Ministry of Infrastructure and Environment and the regional governments (provinces and major municipalities) then negotiate translation of this generic national policy into plans for regional development to be specified in policy statements called *Regional Spatial Agendas*. The national government then uses all these regional spatial agendas as the basis for its *Long-term program on spatial development, infrastructure, and transport*, that combines the plans for regional development with a detailed budget. In these three types of policy documents the national government mentions two other policies:
2. The ministry of Infrastructure and Environment’s *Space for bicycles* program aims to provide bicycle facilities, in particular for parking, to enable better access to, and more use of, railways.
3. The ministry’s *Better use of transport infrastructure* program aims at improved ‘accessibility’ without extensive redesign of infrastructure, for example, by rewarding travel outside rush hours.



**Table 1:** Policies relevant to active transport

Policy	Structure vision Infrastructure and spatial development (Dutch Acronym SVIR)							
Policy description	Generic policy vision concerning spatial and mobility planning. It describes planned governmental investments from a nation-wide perspective. This broad policy document replaces several sectoral policies, like highway development policy, public transport policy, and spatial policy for the western Holland conurbation. Cycling is mentioned amongst ways to solve spatial planning and transport infrastructure problems, but holds a minor place in the policy							
Responsibilities	Generic policy: national government (Ministries)							
Policy goals	Improving accessibility of cities and regions, safety and livability							
Policy drivers	Accessibility linked to development of a competitive economy							
Policy tools	Legal measures	Subsidies	Rewards	Penalties	Written materials	Behavior change	Bike/walk facilities	Environment change
HiAP typology	Health in All Policies		Health Policy		Health relevant sectoral policy		Health relevant intersectoral policy	
Policy	Long-term program spatial development, infrastructure and transport (Dutch Acronym MIRT)							
Policy description	Financial framework containing programs and activities on national and regional level. This is based on SVIR and on 8 regional spatial agendas, developed by regions together with national government. Cycling is part of MIRT, but responsibility for actual development of programs and projects as well as realization of those is left to regions and cities							
Responsibilities	Generic policy: national government (Ministries) Actual plans and programs: regions Cycling/walking specific programs/plans: cities							
Policy goals	Improving accessibility of cities and regions, safety and livability							
Policy drivers	Accessibility linked to development of a competitive economy							
Policy tools	Legal measures	Subsidies	Rewards	Penalties	Written materials	Behavior change	Bike/walk facilities	Environment change
HiAP typology	Health in All Policies		Health Policy		Health relevant sectoral policy		Health relevant intersectoral policy	

Policy	Regional spatial agendas								
Policy description	Eight regions develop a vision for future development and implement this in local projects, linked to their specific context and problems. These agendas have no legal basis, but serve as agenda setting for negotiations with the Ministry in the MIRT framework. They do not contain new policy developments								
Responsibilities	Eight regions are each responsible for their own spatial agenda. They work with municipalities to develop these								
Policy goals	Different policy goals for each region. Examples: protection against flooding, livability of the region, sustainability								
Policy drivers	Accessibility linked to development of a competitive economy, livability for citizens								
Policy tools	Legal measures	Subsidies	Rewards	Penalties	Written materials	Behavior change	Bike/walk facilities	Environment change	
HiAP typology	Health in All Policies		Health Policy		Health relevant sectoral policy		Health relevant intersectoral policy		
Policy	Better use (of transport infrastructure)								
Policy description	Generic policy vision linked to concrete measures in transport infrastructure: road, rail, air, and water. It contains budgets spent on projects and activities fitting this policy vision								
Responsibilities	Generic policy and large infrastructural projects: national government Infrastructural projects on regional scale: provinces Municipalities and provinces cooperate where local issues are linked to this vision								
Policy goals	Reduce traffic jams by 20 per cent, efficient use of infrastructure, improvement of accessibility								
Policy drivers	Accessibility linked to development of a competitive economy (brainports and mainports)								
Policy tools	Legal measures	Subsidies	Rewards	Penalties	Written materials	Behavior change	Bike/walk facilities	Environment change	
HiAP typology	Health in All Policies		Health Policy		Health relevant sectoral policy		Health relevant intersectoral policy		



Table 1: Continued

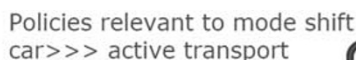
Policy	Space for bikes							
Policy description	Program to improve bicycle facilities at railway stations, in particular bike parks.							
Responsibilities	National Government in cooperation with Prorail (rail infrastructure company) and Dutch Railways Company. Coordination with municipalities							
Policy goals	Increase number of train passengers							
Policy drivers	Reduce pressure on motorways: accessibility. Financial: rail efficiency, economic development.							
Policy tools	Legal measures	Subsidies	Rewards	Penalties	Written materials	Behavior change	Bike/walk facilities	Environment change
HiAP typology	Health in All Policies		Health Policy		Health relevant sectoral policy		Health relevant intersectoral policy	

Policy	Safe traffic action program							
Policy description	Long term program to reduce accidents. Contains budgets for risk reducing measures in traffic. Accidents are monitored. The program contains accident reduction ambitions							
Responsibilities	National government (program coordination and measures on large infrastructural facilities) Provinces: coordination and implementation on provincial level Municipalities: coordination and implementation of local level measures							
Policy goals	Reduce number of traffic accidents							
Policy drivers	Reduce number of people injured or killed in traffic accidents							
Policy tools	Legal measures	Subsidies	Rewards	Penalties	Written materials	Behavior change	Bike/walk facilities	Environment change
HiAP typology	Health in All Policies		Health Policy		Health relevant sectoral policy		Health relevant intersectoral policy	

Policy	Climate agenda							
Policy description	Broad policy focusing transport, housing, industry and energy, agriculture, linked up to European climate targets							
Responsibilities	National government: rules and regulations and financial measures contributing to CO <sub>2</sub> reduction Provinces and cities are stimulated to develop their own climate agendas. Private sector is explicitly seen as a partner.							
Policy goals	Reduce CO <sub>2</sub> emission							
Policy drivers	Adhere to EU targets, sustainability							
Policy tools	Legal measures	Subsidies	Rewards	Penalties	Written materials	Behavior change	Bike/walk facilities	Environment change
HiAP typology	Health in All Policies		Health Policy		Health relevant sectoral policy		Health relevant intersectoral policy	

Policy	Action agenda architecture and spatial design							
Policy description	Policy vision on future development of local (urban) environments. It includes views on development of multi transport networks that provide opportunities to further develop urban conglomerates, as well as creation of multimodal focal points where intensive transport is needed.							
Responsibilities	National government together with municipalities, some connection to provincial policies.							
Policy goals	Adapt to cultural, technological, demographic developments							
Policy drivers	Social and economic progress							
Policy tools	Legal measures	Subsidies	Rewards	Penalties	Written materials	Behavior change	Bike/walk facilities	Environment change
HiAP typology	Health in All Policies		Health policy		Health relevant sectoral policy		Health relevant intersectoral policy	





**Figure 3: Policies relevant to mode shift from car use to active transport.**

Three additional national policies also contribute: 1) the Safe traffic action program, 2) the Climate agenda, and 3) the Action agenda: architecture and spatial design.

Bicycle use and bicycle facilities are embedded in policies in this web, in *Space for bicycles*, *Better use of transport infrastructure*, and the *Safe traffic action programme*. Walking is addressed only as recreation, and not – like bicycling – as a means of day-to-day transport. Promotion of bicycle use is not a primary policy goal, and healthy life-style not the impetus for promoting cycling. Improving environmental quality through transport is a goal in some policies, but one mainly addressed by technical innovations like energy-saving cars.

We found that the Netherlands develops policies to improve transport and spatial planning nationally, but most often generates at the local level those specific to bicycle use. The policy tools most frequently used to influence transport behavior are writings describing policy visions and directions. The national government subsidizes programs or projects that link their aims and activities to national government policy visions.

Tools other than communication or subsidies are scarcely used in national government policies that impact bicycle use. Safe traffic policy is an exception, where national government does apply the complete range of policy tools previously noted. The relevant policies are intersectoral (transport linked with spatial planning, economic policies, and agriculture) – but without health sector engagement.



## Limitations

The possibility remains that we missed some relevant policy documents even though several search rounds repeatedly produced the same documents. Because policy documents do not fully represent policy development processes, the focus group interviews helped us correct our findings. But respondent views are not generalizable for all 12 provinces and 400 municipalities.

## Implications of this Study for Bicycle use and Future Policy

We have tried to develop a clear picture of how the Netherlands included promoting a shift from car to bicycle in national policies 2010–2012. We learned that important policy change had occurred after decades of highly effective promotion of bicycle use. During our study period, national transport policies no longer targetted bicycles, and health, except accident prevention policy, was neither a formal transport policy goal nor a driver of transport policy. Although Dutch national and local health policies promote physical activity and engagement in sports generally, they did not include cycling (and walking ) as active transport modes (2010–2012). Our findings are consistent with earlier research showing that cooperation between health and ‘hard’ sectors like spatial planning and transport is much less common than between health and ‘softer’ sectors like social protection or education.<sup>23</sup> Even so we had expected that cycling, so strongly embedded in Dutch culture, would be the exception to this rule.

We suspect that exactly that embeddedness of cycling in our national culture is the cause, what the historian Romein called, ‘the handicap of a head start’.<sup>24</sup> The omnipresence of Dutch bicycle culture apparently leads policymakers to believe that no explicit policy to stimulate cycling is necessary. They ignore evidence showing space for further increase of cycling. Current transport policies may inadvertently and silently reduce cycling. The Dutch may find that this largely unnoticed change of policy focus may begin to function as a barrier to future policies promoting cycling.

## New opportunities for bicycle promotion

As a world leader in bicycle use, the Netherlands has new opportunities to promote bicycling. Ongoing promotion of cycling by the ANWB

(3,900,000 members)<sup>25</sup> and the Fietzersbond (35,000 members)<sup>26</sup> helps to keep the topic on policy agendas.

The private sector may contribute new technology, like faster or more convenient bicycles, smart roads, and clever traffic lights. ‘App’ technology (applications on smart telephones) may help to coax people into cycling, for example, by mapping the fastest, most attractive, or safest routes.<sup>27</sup> Stimulating cycling in company occupational health policy may reduce sick leave by<sup>28</sup> rewarding staff who cycle to work, providing parking space, installing showers and lockers at the work place, or replacing car lease programs by bicycle lease programs.

The role of policymakers remains crucial. Municipalities could more strongly combine and align their responsibilities for local transport, land use policies, and urban planning, with health promotion, including promotion of bicycle use. Provinces may intensify policies on long distance bicycle routes as well as recreational bicycle and walking infrastructure. Health cannot, however, be the only policy goal; effective HiAP requires looking for common interests, then understanding and acknowledging the aims and objectives of other sectors.<sup>6,29</sup> In the Netherlands new opportunities await because accessibility and proximity are the main reasons people choose bicycling instead of a car trip<sup>15</sup> – precisely the highest priorities in current Dutch transport policies. We believe that such intersectoral public sector action, along with activities in the private sphere, may become as successful as earlier policies, provided that coordination among provinces, municipalities, and national government works as a two-way process in which local and regional policymakers can effectively place their active transport ambitions on the national policy agenda.

### HiAP: Lessons learnt

Our case study illustrates the risks associated with relying on earlier success. Effective HiAP requires sustained effort. HiAP, while ardently promoted by those in public health, is not easy to translate into practice. We saw little national level awareness about the health relevance of bicycling. Absence of formal structures or legislation for HiAP in the Netherlands amounts to an important impediment. If HiAP is to be more than a symbolic concept, the health sector should start by examining priorities among values expressed in policies of other sectors. Health advocates can frame ‘win-win’ opportunities to enhance intersectoral



cooperation. South Australia offers a promising example. There, HiAP guides a mutual process whereby the health sector supports other sectors' goals, for example employability, and other sectors in turn choose healthy options in policy-making.<sup>30</sup> HiAP is not the same as health imperialism; it can only become reality by developing a genuine, and lasting interest in the policies and partners involved.

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